

**Forest Fires.**—*Smoke* was reported as follows: Morgantown, W. Va., 21st; Detroit, Mich., 28th; Rochester, 7th, 27th and 28th; Buffalo, N. Y., 21st; Pittsburgh, Pa., 20th; Cheyenne, Wy. T., 12th; Sacramento, Cal., 4th, 8th, 9th, 18th, 20th, 22nd, 24th, 26th, 28th and 29th; Milwaukee, Wis., 13th; Springfield, Mass., 24th and 25th; North Platte, Neb., 24th. *Forest fires* of importance were reported: Denver, Col., heavy fires in mountains, 27th and 28th; Visalia, Cal., heavy fires in mountains, 17th, 18th and 20th, (fine whirlwind of cloud and smoke observed for 45 minutes.) *Prairie fires*: Bracketsville, 1st, 2nd, 3rd, 4th and 5th; Bismarck, Dak., 10th, 12th and 22nd to 29th; at several stations in Dakota, 2nd, 6th, 7th, 8th, 11th, 13th, 21st, 27th, 28th, 29th and 30th; Dodge City, Kan., 16th, 17th, 20th, 21st, 22nd, 23rd and 24th.

**Meteors** were observed: 1st, Dubuque, Iowa. 3rd, Visalia, Cal.; Boise City, Idaho. 5th, Savannah, Ga. 7th, Boise City, Idaho. 8th, Savannah, Ga. 10th, Dubuque, Iowa; Mt. Washington, N. H. 13th, Yankton, Dak. 15th, Savannah, Ga. 16th, Bismarck, Dak. 19th, Indianapolis, Ind. 23rd, Burlington, Vt. 26th, Stockton, Texas. 27th, Savannah, Ga. 28th, Bangor, Me. 29th, Eagle Pass, Tex., 7:20 p. m., in the N. altitude 30°; Visalia, Cal., 9:05 p. m., 30° N. of zenith. 30th, Yankton, Dak.; Davenport, Iowa.

**Zodiacal Light** was observed at Monticello, Iowa, 1st, 10th, 12th and 13th; Savannah, Ga., 2nd, 3rd, 5th, 6th, 8th, 9th, 26th and 27th; Cambridge, Mass., 30.

**Earthquakes.**—1st, Md., Latonsville, about 11 p. m.; also at Sandy Springs, at 10:45 p. m.; Brookville, Laurel and other points in Prince George's County, 20th or 21st. Yuma, Arizona, 7th, 10 p. m. 19th, Los Angeles, Cal., 4th, 2 p. m. 10th, a shock, resembling that of an earthquake, was distinctly felt at the following places: in New Jersey at Trenton, Hamilton Square, Allentown, Bordertown, Chester, Burlington, Wrightstown, Pemberton, Mt. Holly, Beverly, Riverton; and in Pennsylvania at Bristol, Torresdale, Bustleton, Germantown, Abington, Mt. Airy, Manayunk, Ashbourne and Roxburgh. Nearly all report the time as 9:59 a. m., the shock lasting from 30" to 40" and having an apparent southwest or southeast direction. Hulmeville, Pa., reports shock lasting 5 to 7 seconds from W to E. It was accompanied by a rumbling noise like moderate thunder; its intensity gradually increasing, and ranging from a gentle tremor to a force, making windows rattle and shaking fruit from trees. The track of country over which it was felt extended from a little north of Trenton to Philadelphia, or about 35 miles long by about 20 miles wide; its longitudinal axis corresponding with its apparent track. Possibly this phenomena was due to a passing meteor. 29th, Campo, Cal., at 2:30 p. m., shock lasting five seconds, accompanied by low rumbling. Advices from Callao, September 1st, and Valparaiso, August 18th, report earthquake shocks being continuously felt in some of the southern ports. Shocks of an alarming nature were felt, August 23d, at Cobija, Bolivia, at 1:40 p. m., and at Iquique at 5 p. m., and a few days earlier at Copiapo, Chili.

**Volcanic Eruptions.**—Advices from Kilauea, Hawaii, state that the crater, during the first weeks of September, was very active and brilliant. On the 10th the Old South Lake was about 1,000 feet in length and 600 feet wide, boiling and spouting.

## SOLAR PHENOMENA.

**Sun spots.**—The following observations, made by Mr. D. P. Todd, upon the spots of the sun, have been kindly communicated by Rear Admiral John Rodgers, U. S. N., Superintendent of the Naval Observatory:

Sept., 1877.	No. of new—		Disappeared by solar rotation.		Reappeared by solar rotation.		Total number visible.		Remarks.
	Groups	Spots.	Groups	Spots.	Groups	Spots.	Groups	Spots.	
1st, 5 p. m.	0	0	0	0	0	0	0	0	Brilliant faculae.
2nd, 5 p. m.	0	0	0	0	0	0	0	0	
3rd, 6 p. m.	1	2	0	0	1	2	1	2	
4th, 8 a. m.	0	0	0	0	0	0	1	2	
4th, 4 p. m.	0	0	0	0	0	0	1	2	
8th, 6 p. m.	0	4	0	0	0	0	1	6	
9th, 4 p. m.	0	3	0	0	0	0	1	9	
13th, 6 p. m.	1	1	0	2	1	1	2	6	
16th, 11 a. m.	0	4	1	5	1	2	2	6	
16th, 3 p. m.	0	0	0	0	0	0	2	6	
17th, 11 a. m.	0	7	0	0	0	0	2	12	Many of the spots small. Spots all faint. Large group of faculae. Faculae large and bright.
19th, 3 p. m.	0	6	0	0	0	0	2	18	
21st, 11 a. m.	0	0	1	2	0	0	1	6	
22nd, 10 a. m.	1	4	0	0	0	0	2	10	
24th, 11 a. m.	0	0	0	0	0	0	0	0	
26th, 11 a. m.	2	3	0	0	1	2	2	3	
28th, 11 a. m.	0	0	0	0	0	0	2	3	
27th, 3 p. m.	0	0	1	1	0	0	1	2	
29th, noon	0	0	0	0	0	0	1	1	
30th, 3 p. m.	0	1	0	0	0	0	1	2	